

REMARKS

In summary, claims 1-46 are pending. Claims 1-46 are rejected under 35 U.S.C. § 103. Claims 1, 22, 25, and 26 are hereby amended without adding new matter. Support for the amendments can be found at paragraph [0028] of the specification. Reconsideration in view of the following remarks is respectfully requested.

Telephone Conversation With Examiner

Applicant's representative thanks Examiner Pardo for the telephone conversation conducted on December 19, 2007. During the conversation Applicant's representative stated that it appeared that previously provided arguments were not addressed in the instant Office Action because the previous rejections were repeated. Examiner Pardo explained that repeating the previous rejection was an indication that the rejection was maintained in view of the previous arguments. Applicant's representative and Examiner Pardo also discussed the nature of the 103 rejection and what was required to show the proposed modification of Draper and Lee necessary to arrive at the claimed subject matter.

Response To Previous Arguments

In the instant Office Action, at page 8, it is stated that "Applicant's [previous] arguments with respect to claims 1-46 have been considered but are moot in view of the new ground(s) of rejection." However, a new ground of rejection has not been provided for all of Applicant's previously submitted arguments (submitted in the Office Action Response dated August 8, 2007). Rather, the instant Office Action merely repeats the previous rejections. For example:

- Applicant previously argued that Draper neither discloses nor suggests "a divergence in transaction history". This argument has not been addressed, other than to repeat the previous argument.
- Applicant previously argued that Draper neither discloses nor suggests "a fail over log sequence number (FOLSN)". Again, this argument has not been addressed, other than to repeat the previous argument.
- Applicant previously argued that Draper teaches away from the use of multiple logs. This argument has not been addressed.

Request For Resubmission Of Office Action

Applicant maintains the previous position with respect to arguments that have not been addressed in the instant Office Action. Because arguments have not been addressed, Applicant is denied the opportunity to reply completely. “The goal of examination is to clearly articulate any rejection early in the prosecution process so that the applicant has the opportunity to provide evidence of patentability and other wise reply completely at the earliest opportunity.” (Emphasis added) MPEP § 706. Accordingly, if Examiner wishes to maintain the rejection of the claims, Applicant requests to be provided in another non-final Office Action a response to previously provided arguments. Alternatively, it is requested that the rejection of the claims be reconsidered and withdrawn.

Rejection of Claims 1-46 under 35 U.S.C. § 103

Claims 1-46 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,924,096 to Draper *et al.* (hereinafter referred to as “Draper”) in view of U.S. Patent No. 6,078,930 to Lee *et al.* (hereinafter referred to as “Lee”). (Office Action, pp. 2-7) Applicants respectfully traverse all rejections.

Draper and Lee, whether considered separately or together, neither disclose nor suggest all claim limitations. For example, Draper and Lee, whether considered separately or together, neither disclose nor suggest “a divergence in transaction history, . . . , wherein the divergence in transaction history comprises at least one of: a condition in which D1 fails for a period of time during which D1’ remains operational, and D1 is brought back online; or a condition in which D1 has provided data to the database and the data has not been received by D1” as recited in amended independent claims 1, 22, 25, and 26.

Additionally, Draper and Lee, whether considered separately or together, neither disclose nor suggest “a fail over log sequence number (FOLSN)” as recited in independent claims 1 and 26, “fail over sequence numbers” as recited in independent claim 22, or “a log sequence number (LSN)” as recited in independent claim 25. As described in Applicant’s application, upon the occurrence of a divergence in transaction history, a FOLSN (fail over sequence number, or LSN) describes the location of the divergence. Draper does not teach a FOLSN, fail over sequence number, or LSN, because Draper is not concerned with a

divergence in transaction history. In the instant Office Action, Draper, Figure 5, items 514-518, again are cited to support the argument that Draper teaches an FOLSN, an LSN, or a fail over sequence number. It is reiterated that items 514-517 of Draper are part of an event creation list for updating a cache (Draper Figure 5) rather than for synchronizing.

Draper and Lee, whether considered separately or together, neither disclose nor suggest multiple logs as taught in independent claims 1, 22, 25, and 26. In fact, Draper actually teaches away from multiple logs. Draper discusses “synchronizing local copies of a distributed database [where] each data item in the database has an associated timestamp or other tag.” Draper, Abstract. “The tag is not part of the synchronized data 202; the tag 204 is only used locally.” Draper, Abstract. A “tag index [is] used to create a virtual update log, thereby removing the need to maintain one or more physical logs.” (Emphasis added). Draper, Abstract. Further, Draper goes on to recite a laundry list of “problems” with physical logs at column 10, lines 51-67 and column 12, line 29 – column 13, line 9. “The present invention differs from implementations which use physical update logs by not requiring that a physical list of update events be maintained.” (Emphasis added). Draper, col. 10, ll. 42-44. Thus, Draper clearly teaches away from the use of logs.

Lee teaches away from Applicant’s claimed invention and Draper. Contrary to the argument provided in the instant Office Action on page 3, Lee does not disclose multiple logs and Lee does not disclose any comparison between a current timestamp and a crashed node timestamp. Instead, Lee discloses (a) only one log stored in the one database and (b) the recovery node simply identifies in the single log the last timestamp for the crashed node without comparison. “Unlike distributed databases [such as in Draper], both single-node and multi-node parallel databases provide a single database image.” Lee, col. 1, ll. 28-29. “When any of the nodes make changes to the database, the nodes store within the [single] database a time value, read from their logical clock.” Lee, col. 4, ll. 24-26. “After failure of the first node, a recovery node determines ... the latest time value stored by the first node for logged changes by reading the time value stored in the most recent log entry for the crashed node.” Lee, col. 4, ll. 29-35. “[R]etriev[ing] the most recent timestamp value associated with changes stored to disk by the crashed node requires the recovery node to search specific areas of the [single] database for the

most recent logical timestamp of the crashed node.” Lee, col. 8, l. 66 – col. 9, l. 3. Thus, Lee teaches away from the use of multiple logs as claimed.

Per MPEP § 2145, it is improper to combine references where the references teach away from their combination.” Accordingly, it is improper to combine Draper and Lee because Lee teaches away from distributed databases (which are taught in Draper).

The combination of Draper and Lee also is improper because no rationale has been provided to combine Draper and Lee. And, the proposed modification of Draper and Lee necessary to arrive at the claimed subject matter has not been provided.

Per a recent update to MPEP § 706.02(j) to include examination guidelines in view of *KSR v. Teleflex*, 35 § U.S.C. 103 authorizes a rejection where, to meet the claim, it is necessary to modify a single reference or to combine it with one or more other references. After indicating that the rejection is under 35 § U.S.C. 103, the examiner should set forth in the Office action: (A) the relevant teachings of the prior art relied upon, preferably with reference to the relevant column or page number(s) and line number(s) where appropriate, (B) the difference or differences in the claim over the applied reference(s), (C) the proposed modification of the applied reference(s) necessary to arrive at the claimed subject matter, and (D) an explanation as to why the claimed invention would have been obvious to one of ordinary skill in the art at the time the invention was made.

It is important for an examiner to properly communicate the basis for a rejection so that the issues can be identified early and the applicant can be given fair opportunity to reply. Furthermore, if an initially rejected application issues as a patent, the rationale behind an earlier rejection may be important in interpreting the scope of the patent claims. Since issued patents are presumed valid (35 U.S.C. 282) and constitute a property right (35 U.S.C. 261), the written record must be clear as to the basis for the grant. Since patent examiners cannot normally be compelled to testify in legal proceedings regarding their mental processes (see MPEP § 1701.01), it is important that the written record clearly explain the rationale for decisions made during prosecution of the application.

Because no explanation of how Draper and Lee would have to be modified to arrive at Applicant's claims, the combination of Draper and Lee is improper.

Additionally, with respect to claims 2-46, no arguments specific to claims 2-46 supporting obviousness are provided. Per MPEP § 2142, “[t]he key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reasons(s) why the claimed invention would have been obvious. The Supreme Court in *KSR International Co. v. Teleflex Inc.*, 550 U.S. __, __, 82 USPQ2d 1385, 1396 (2007) noted that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit. The Federal circuit has stated that ‘rejections on obviousness cannot be sustained with mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.’” (Emphasis added). Accordingly, per MPEP § 2143, a *prima facie* case of obviousness has not been established because no clear articulation of the reasons why the claimed invention would have been obvious has been provided, and because no explicit analysis supporting the rejection under 35 U.S.C. § 103 has been provided.

In view of the foregoing amendments and arguments, it is requested that the rejection, under 35 U.S.C. § 103, of claims 1-46 be reconsidered and withdrawn.

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PATENT

CONCLUSION

In view of the foregoing remarks and amendments, it is respectfully submitted that this application is in condition for allowance. Reconsideration of this application and an early Notice of Allowance are requested.

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